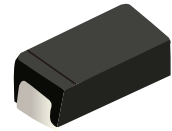


FEATURES

- | Glass Passivated Die Construction
- | Fast Recovery Time for High Efficiency
- | Low reverse leakage
- | Ideally Suited for Automatic Assembly



DO-214AC(SMA)



Schematic Symbol

MECHANICAL DATA

- | Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- | Moisture Sensitivity: Level 1 per J-STD-020
- | Weight: 0.064 grams (approximate)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Symbol	Parameter	RS2AA	RS2BA	RS2DA	RS2GA	RS2JA	RS2KA	RS2MA	Unit
	Marking	RS2AA	RS2BA	RS2DA	RS2GA	RS2JA	RS2KA	RS2MA	
V _{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700	
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000	
I _{F(AV)}	Maximum average forward rectified current	2.0							A
I _{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	50							
R _{θJA}	Typical thermal resistance (Note 1)	86							°C/W
R _{θJL}	Typical thermal resistance (Note 1)	14							
I _R	Maximum reverse current @rated V _R per diode (Note2)	T _J =25°C							uA
		T _J =125°C							
V _F	Maximum forward voltage I _F =2A, T _J =25°C(Note1)	1.3							V
t _{rr}	Maximum reverse recovery time @I _F =0.5A,I _R =1.0A,I _{RR} =0.25A	150				250	500		us
T _J	Operating junction temperature rang	-55~+150							°C
T _{STG}	Storage temperature rang	-55~+150							°C

Note 1: Pulse test with PW=0.3mS

Note 2: Pulse test with PW=30mS

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

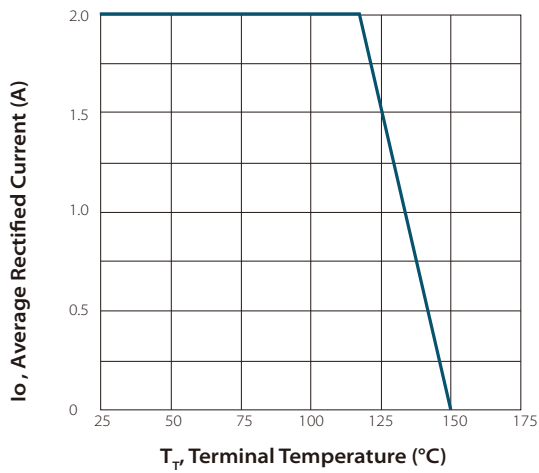


Fig.2 Typical Forward Characteristics

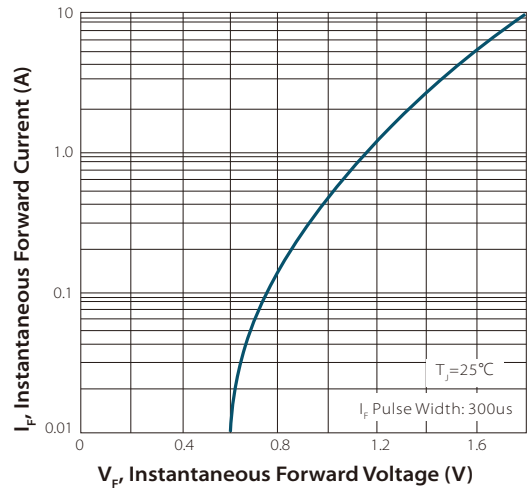


Fig.3 Forward Surge Current Derating Curve

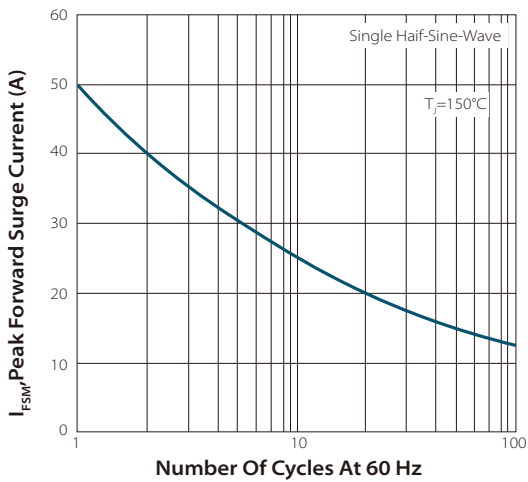
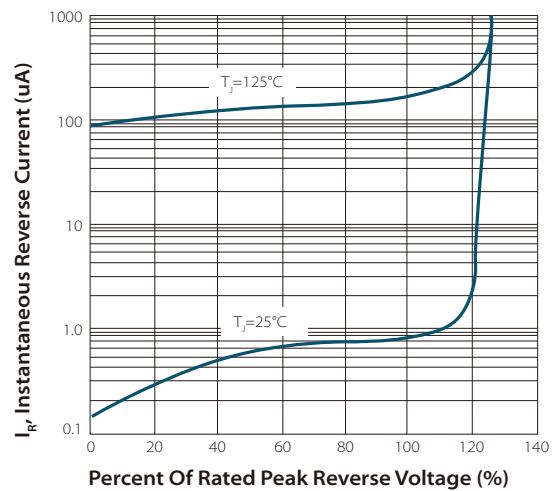
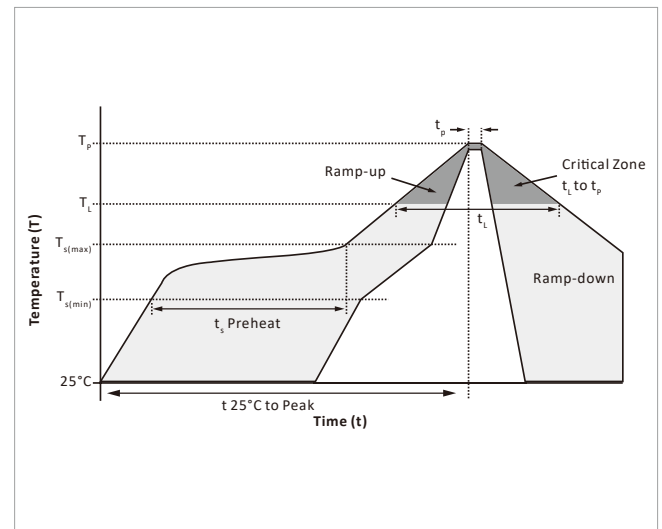


Fig.4 Typical Reverse Characteristics

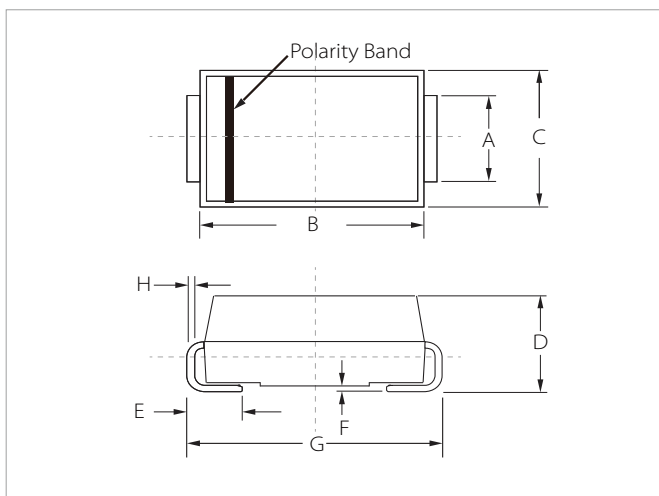


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_p)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

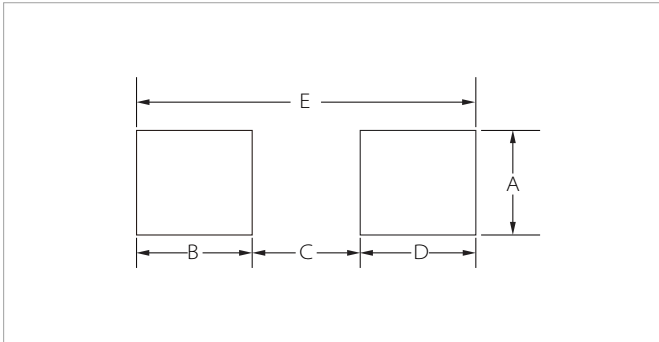


DO-214AC(SMA) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.20	1.60	0.047	0.063
B	4.20	4.60	0.165	0.181
C	2.60	2.80	0.102	0.110
D	2.10	2.40	0.083	0.094
E	0.76	1.52	0.030	0.060
F	0.02	0.20	0.001	0.008
G	4.85	5.25	0.191	0.207
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.63	-	0.064	-
B	1.45	-	0.057	-
C	-	2.80	-	0.090
D	1.45	-	0.057	-
E	5.28REF		0.208REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
RS2AA-RS2MA	DO-214AC(SMA)	5000PCS	13"

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